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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,832	10/20/2005	Mario Giorgio Prussiani	2502-1089	6302

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ALEXANDRIA, VA 22314

EXAMINER

SCRUGGS, ROBERT J

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

03/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/553,832

Applicant(s)

PRUSSIANI, MARIO GIORGIO

Examiner

ROBERT SCRUGGS

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-23, 26-31 and 33-44 is/are pending in the application.
- 4a) Of the above claim(s) 1-18, 24, 25 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-23, 26-31 and 33-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 2, 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19-23, 26, 33-38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (5221034) in view of Warren (4777787) and Christian (previously cited).

In reference to claims 19 and 33, Bando discloses a circular blade device (Figure 14) for cutting flat marble, granite, glass or similar sheets (22), comprising numerical control means (Column 2, Lines 10-22) for a cutting head (64) having a blade (72) addressable within a cutting volume and comprising means for manipulating said sheets within said cutting volume, the manipulating means for said sheets comprising at least one

manipulator member (63) arranged to cooperate with the sheet being cut and employing suction to hold the sheet, wherein numerical control means are arranged to move the cutting head along a first, a second and a third axis (68,71,73) of translation perpendicular to one another, but lacks, rotating the cutting head about the third axis and having said manipulator member being mounted on and movable with said cutting head. However, Warren teaches of rotating a cutting head (90) about a vertical axis (Figure 3). Also, Christian teaches of mounting a manipulator member (54) on a cutting head (53) (Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cutting head, of Bando, with a cutting head that rotates with respect to a third vertical axis and to mount a manipulator member on the cutting head, as taught by Warren and Christian, in order to alter the apex of the cutting head into various positions thereby allowing for multiple types of cuts to be performed on a workpiece and to provide a single cutting head that can accomplish numerous tasks with a single member.

In reference to claims 20-23 and 34-37, Bando also discloses that said manipulator means can move vertically (Column 7, Lines 29-30) are of a rigid pneumatic type and are controlled by the numerical control means (Column 2, Lines 10-22).

In reference to claims 26 and 38, Bando also discloses that said numerical control means are arranged to rotate said cutting head about a fourth axis that is perpendicular to said third axis by using member (74) to enable cuts to be made with their edge

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inclined to the upper and lower surface of the sheet. (Column 7 Line 61-Coulnm 8, Line 2).

In reference to claim 44, Bando also obviously discloses that the blade is flat and disposed in a plane parallel to the third axis, assuming arguendo, the device includes an angle adjusting mechanism (74) therefore the blade could obviously be angled in such a way to provide a blade disposed in a plane parallel to the third axis.

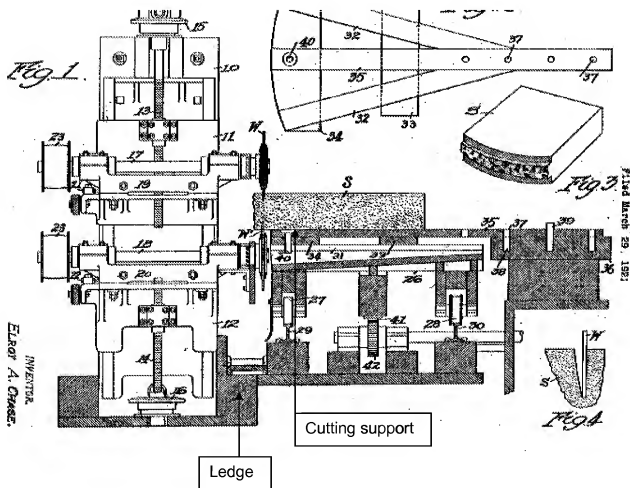
4. Claims 27-31, 39 and 40-43 rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (5221034) in view of Warren (4777787), Christian (previously cited) and Chase (1509585).

In reference to claims 27 and 39, Bando discloses the claimed previously mentioned above, but lacks, a cutting disc disposed below the workpieces. However, Chase discloses a lower cutting disc (W') disposed below the workpiece (S). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Bando, with lower cutting disc, in view of Chase, in order to cut different sections of a workpiece simultaneously thereby increasing production and efficiency.

In reference to claims 28 and 40, Bando discloses the claimed previously mentioned above, but lacks, a cutting disc disposed to a side of the cutting support. However,

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Chase discloses a cutting disc (W') disposed to a side of the cutting support (See figure below). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Bando, with lower cutting disc, in view of Chase, in order to cut different sections of a workpiece simultaneously thereby increasing productivity and efficiency.



In reference to claims 29 and 41, Chase also teaches that the cutting disc can be moved vertically (Lines 52-55).

In reference to claims 30 and 42, Chase also discloses that cutting disc is part of a milling machine rigid with a frame (10) mounted on vertical guides (13, 14).

In reference to claims 31 and 43, Chase also discloses that the vertical guides are fixed to a ledge projecting from said support (see figure above).

Response to Arguments

5. Applicant's arguments filed January 2, 2008 have been fully considered but they are not persuasive.
6. Applicant contends that, **"BANDO refers to a device which may not move (see BANDO, Figure 1, showing the feet of the apparatus not being wheels); in addition, the apparatus of BANDO, as the apparatus of the present invention, works very delicate glass sheets which would not resist vibrations or hits. Thus, also for these reasons, the skilled person to improve the device of BANDO would not have looked for useful teachings in WARREN which refers to a device very different and which, during working, causes vibrations and possibly hits which could cause breaking of the glass sheets."**

a. However, the examiner respectfully disagrees with these statements. While the device of Warren is shown for cutting trees, the examiner believes this aspect is moot because it still teaches the concept of rotating a cutting head about a vertical axis which would be the third axis when combined with Bando. With this teaching, the device of Bando becomes more versatile by providing a device that can alter the apex of the cutting head into various positions thereby

allowing for multiple types of cuts to be performed on a workpiece therefore the examiner believes the rejection is proper.

7. Applicant contends that, **"CHRISTIAN shows a cutting head 75 carrying the blade 74 and a further head 54 carrying the suction means. These heads are connected with each other by the cylinder 70. On the contrary, claims 19 and 33 of the present application claim that the device is provided with one single head having both the blade and the suction means for making the removal of the cut pieces easier and faster."**

b. However, the examiner respectfully disagrees with these statements. Looking at figure 1 of Christian the manipulator member (54) is clearly shown as being mounted on the cutting head (53) therefore the examiner believes the rejection is proper.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT SCRUGGS whose telephone number is (571)272-8682. The examiner can normally be reached on Monday-Thursday, 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RS

/Joseph J. Hail, III/
Supervisory Patent Examiner, Art Unit 3723